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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,543	07/19/2001	Sheng Li	3442P014	1957

8791 7590 09/01/2006

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EXAMINER	
SINGH, RACHNA	

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/909,543	LI, SHENG	
	Examiner	Art Unit	
	Rachna Singh	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 June 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18 and 24-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-18 and 24-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: Amendment filed on 06/07/06.

2. Claims 1-18 and 24-28 are pending. Claims 1, 7, 10, 12, and 14 are independent claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-6, 10, 12, 14, and 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Witteman, US 2002/0055950 A1, 5/9/02 (filed 4/23/01, continuation of an application filed 12/23/98).

In reference to claims 1, 10, 12, and 14, Witteman teaches synchronizing audio and text of multimedia segments. See abstract. Compare to ***"A method for***

synchronizing multimedia data having at least audio and text sequences".

Witteman teaches the following:

-Separating the audio component and closed caption component from a single stream. Generating an audio pattern representative of the start of the multimedia segment; locating the audio pattern in the audio component; generating a concluding audio pattern representative of the end of the multimedia segment; locating the concluding audio pattern in the audio component; identifying the multimedia segment between the audio patterns. See page 1, paragraphs [0005]-[0009]. Determining the start of the audio block, indexing the audio block, and sending the audio block to an information store. See page 2, paragraphs [0027]-[0029], page 3, paragraph [0032], and figure 3. Witteman discloses temporally aligning the text with the audio pattern in the audio component. See page 1, paragraph [0010] and figure 3, elements 444, 446, and 448 which illustrate temporally aligning (in seconds) the audio information with the text information using text marks (in seconds). Compare to ***"dividing the audio sequence into a plurality of equally-sized audio data groups; matching each audio data group of said plurality of audio data groups to a nearest time mark within a discrete series of time marks separated by a predefined time period"***. Temporally aligning the audio and text information in seconds is "equally" dividing the groups into equally sized segments. Dividing the audio sequence into a plurality of equally-sized audio data groups is a means to "distinguish" one audio group from another in order to match each audio group to the nearest time mark within a series of time mark separated by a predefined time period. When Witteman teaches "temporally aligning" audio

groups and text into seconds, he is "distinguishing" each audio group according to the nearest time mark in a series of time mark separated by a predefined time period. In other words, the claimed "dividing" of the audio sequence is an abstract step, not necessarily producing a tangible result, but rather distinguishing the audio groups into equally-sized audio groups based on milliseconds. Thus Witteman's alignment of an audio group according to seconds is "distinguishing" the audio groups into equally sized groups based on seconds.

-Comparing the text against one or more keywords delimiting the multimedia segment and temporally aligning the text with the audio pattern in the audio component. See pages 1-2 and figure 3. Compare to ***"associating each audio data group. . .in the text sequence"***.

Witteman teaches associating the audio pattern to words in a text sequence using a temporal alignment; however, he does not state that a number is used to associate the word to the audio group and each number is uniquely identifying a particular word. The "number of the word" is used to put the words of a text sequence in order. Witteman teaches that the text in the closed caption components are aligned temporally. See figure 3, 448 illustrating time in seconds associated with the various audio and closed-caption (i.e. text) information. Applicant's specification on pages 5-7 recites, *"the words in the text sequence may then be synchronized to the audio data groups by linking the word number with each audio data group. A special word number may be used to indicate that the text should not be advanced when the word audio portion is longer than the audio data group size or when the current audio data group*

has a sound gap . . .the word ordinal number 302 represents the order of a word within a text sequence." It would have been obvious to a person of ordinary skill in the art at the time of the invention to equate Witteman's temporal alignment to the "numbering" the words of a text sequence since both the temporal alignment and the numbering of the words allow the text or phrase to be ordered in a sequential manner which then allows each word of text sequence to be associated with a specific audio group. As further illustrated in figure 3, Witteman teaches associating the audio pattern to words in a text sequence using a temporal alignment where the temporal number (448) are used to illustrate time in seconds associated with the various audio and closed-caption (i.e. text) information.

In reference to claims 2, 3, and 6, Witteman teaches generating an audio pattern representative of the start of the multimedia segment; locating the audio pattern in the audio component; generating a concluding audio pattern representative of the end of the multimedia segment; locating the concluding audio pattern in the audio component; identifying the multimedia segment between the audio patterns. See page 1, paragraphs [0005]-[0009]. Determining the start of the audio block, indexing the audio block, and sending the audio block to an information store. See page 2, paragraphs [0027]-[0029], page 3, paragraph [0032], and figure 3. The start and end of the multimedia segment determine the size of the audio frame. The audio pattern is segmented accordingly. The size of the audio segment is not limited in any manner and could include a size of 100 milliseconds. See figure 3. Witteman discloses temporally

aligning the text with the audio pattern in the audio component. See page 1, paragraph [0010] and figure 3, elements 444, 446, and 448 which illustrate temporally aligning the audio information with the text information using text marks (in seconds).

In reference to claims 4 and 5, Witteman's system temporally aligns the text to the audio pattern. If there is no text for the selected audio component, then the audio component is temporally assigned to nothing except the time. See figure 3.

In reference to claims 24-28, Witteman discloses temporally aligning the text with the audio pattern in the audio component. See page 1, paragraph [0010] and figure 3, elements 444, 446, and 448 which illustrate temporally aligning the audio information with the text information using text marks (in seconds).

5. Claims 7-9, 11, 13, and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Witteman, US 2002/0055950 A1, 5/9/02 (filed 4/23/01, continuation of an application filed 12/23/98) in view of Ishii, US 6,778,493 B1, 8/17/04 (filed 2/7/00).

In reference to claims 7-9, Witteman teaches synchronizing audio and text of multimedia segments. See abstract. Compare to ***"A method for synchronizing a text sequence with an audio sequence"***. Witteman teaches the following:
-Separating the audio component and closed caption component from a single stream.
Generating an audio pattern representative of the start of the multimedia segment;

locating the audio pattern in the audio component; generating a concluding audio pattern representative of the end of the multimedia segment; locating the concluding audio pattern in the audio component; identifying the multimedia segment between the audio patterns. See page 1, paragraphs [0005]-[0009]. Determining the start of the audio block, indexing the audio block, and sending the audio block to an information store. See page 2, paragraphs [0027]-[0029], page 3, paragraph [0032], and figure 3. Compare to ***"arranging the audio sequence into a plurality of audio data groups; synchronizing a current audio data group of said at least one audio data group to a nearest time mark"***. Temporally aligning the audio and text information in seconds is "equally" dividing the groups into equally sized segments.

-Comparing the text against one or more keywords delimiting the multimedia segment and temporally aligning the text with the audio pattern in the audio component. See pages 1-2 and figure 3.

Witteman teaches associating the audio pattern to words in a text sequence using a temporal alignment; however, he does not state that a number is used to associate the word to the audio group and each number is uniquely identifying a particular word. The "number of the word" is used to put the words of a text sequence in order. Witteman teaches that the text in the closed caption components are aligned temporally. See figure 3, 448 illustrating time in seconds associated with the various audio and closed-caption (i.e. text) information. Applicant's specification on pages 5-7 recites, *"the words in the text sequence may then be synchronized to the audio data groups by linking the word number with each audio data group. A special word number*

may be used to indicate that the text should not be advanced when the word audio portion is longer than the audio data group size or when the current audio data group has a sound gap . . .the word ordinal number 302 represents the order of a word within a text sequence." It would have been obvious to a person of ordinary skill in the art at the time of the invention to equate Witteman's temporal alignment to the "numbering" the words of a text sequence since both the temporal alignment and the numbering of the words allow the text or phrase to be ordered in a sequential manner which then allows each word of text sequence to be associated with a specific audio group. As further illustrated in figure 3, Witteman teaches associating the audio pattern to words in a text sequence using a temporal alignment where the temporal number (448) are used to illustrate time in seconds associated with the various audio and closed-caption (i.e. text) information.

Most modern Wide Area Network (WAN) protocols at the time of the invention were based on packet-switching technologies. See figure 5. Witteman does not explicitly teach the packetization of the audio groups and words; however, Ishii illustrates this feature. Ishii teaches real-time media content synchronization and transmission in packet network apparatus and method. Ishii's system teaches transmitting and synchronizing multimedia content for generating a multimedia packet having multimedia audio/visual information and for transmitting the multimedia packet. See abstract and column 3-4. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the packetization of audio and text for delivery over a network since it was well known in the art at the time of the invention

to synchronize and transmit multimedia data streams from one or more sources over a packet-based system to multiple receivers since it would allow multimedia contents to be played in a synchronized manner. See pages 1-4 of Ishii.

In reference to claim 11, most modern Wide Area Network (WAN) protocols were based on packet-switching technologies. See figure 5. Witteman's system could include the packetization of the audio groups and words. Ishii further illustrates this feature. Ishii teaches real-time media content synchronization and transmission in packet network apparatus and method. Ishii's system teaches transmitting and synchronizing multimedia content for generating a multimedia packet having multimedia audio/visual information and for transmitting the multimedia packet. See abstract and column 3-4. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the packetization of audio and text for delivery over a network since it was well known in the art at the time of the invention to synchronize and transmit multimedia data streams from one or more sources over a packet-based system to multiple receivers since it would allow multimedia contents to be played in a synchronized manner. See pages 1-4 of Ishii.

In reference to claim 13, most modern Wide Area Network (WAN) protocols were based on packet-switching technologies. See figure 5. Witteman's system could include the packetization of the audio groups and words. Ishii further illustrates this feature. Ishii teaches real-time media content synchronization and transmission in

packet network apparatus and method. Ishii's system teaches transmitting and synchronizing multimedia content for generating a multimedia packet having multimedia audio/visual information and for transmitting the multimedia packet. See abstract and column 3-4. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the packetization of audio and text for delivery over a network since it was well known in the art at the time of the invention to synchronize and transmit multimedia data streams from one or more sources over a packet-based system to multiple receivers since it would allow multimedia contents to be played in a synchronized manner. See pages 1-4 of Ishii.

In reference to claims 15-18, Witteman teaches comparing the text against one or more keywords delimiting the multimedia segment and temporally aligning the text with the audio pattern in the audio component. See pages 1-2 and figure 3. Most modern Wide Area Network (WAN) protocols were based on packet-switching technologies. See figure 5. Thus Witteman's system inherently includes packetizing of the audio groups and words/text sequences. Furthermore, Witteman discloses a computer system with a file sharing protocol on top of its TCP/IP protocol (most TCP/IP were based on packet-switching technologies at the time of the invention). See page 5. Most modern Wide Area Network (WAN) protocols were based on packet-switching technologies. See figure 5. Ishii further illustrates this feature. Ishii teaches real-time media content synchronization and transmission in packet network apparatus and method. Ishii's system teaches transmitting and synchronizing multimedia content for

generating a multimedia packet having multimedia audio/visual information and for transmitting the multimedia packet. See abstract and column 3-4. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the packetization of audio and text for delivery over a network since it was well known in the art at the time of the invention to synchronize and transmit multimedia data streams from one or more sources over a packet-based system to multiple receivers since it would allow multimedia contents to be played in a synchronized manner. See pages 1-4 of Ishii.

Response to Arguments

6. Applicant's amendments filed 06/07/06 have been reconsidered, but are not persuasive.

It is noted Applicant has overcome 112 rejections made in the office action dated 02/08/06. Accordingly rejections made under 35 U.S.C. 112 have been withdrawn.

Applicant argues Witteman does not teach dividing audio groups into equally sized groups; however, Witteman teaches temporally aligning the audio and text information in seconds. Dividing according to seconds (as illustrated in figure 3) is "equally" dividing the sequence into equally sized segments. Applicant argues on pages 11-12 of the response that aligning a text stream to an audio stream is not

dividing the audio stream itself. Examiner disagrees. Dividing the audio sequence into a plurality of equally-sized audio data groups as claimed by Applicant is a means to "distinguish" one audio group from another in order to match each audio group to the nearest time mark within a series of time mark separated by a predefined time period. When Witteman teaches "temporally aligning" audio groups and text into seconds, he is "distinguishing" each audio group according to the nearest time mark in a series of time mark separated by a predefined time period. In other words, the claimed "dividing" of the audio sequence is an abstract step, not necessarily producing a tangible result, but rather distinguishing the audio groups into equally-sized audio groups based on milliseconds. Thus Witteman's alignment of an audio group according to seconds is "distinguishing" the audio groups into equally sized groups based on seconds.

In view of the comments above, the rejection is maintained.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachna Singh whose telephone number is 571-272-4099. The examiner can normally be reached on M-F (8:30AM-6:00PM). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 571-272-4090.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RS
08/24/06

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